UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,842	10/08/2004	Markus Reiter	20067US	5841
23470 SRAM, LLC	7590 10/29/201	0	EXAM	IINER
1333 N. KINGS	SBURY, 4TH FLOOR		IRVIN, THOMAS W	
CHICAGO, IL	00042		ART UNIT	PAPER NUMBER
			3657	
			NOTIFICATION DATE	DELIVERY MODE
			10/29/2010	ELECTRONIC

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

lserdynski@sram.com mm@sram.com

#### UNITED STATES PATENT AND TRADEMARK OFFICE



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/711,842 Filing Date: October 08, 2004 Appellant(s): REITER, MARKUS

Markus Reiter For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 28 July 2010 appealing from the Office action mailed 28 December 2009.

#### (1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

#### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## (3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1-3, 5, and 7-24 are pending; claims 10, 11, 13, 14, and 17-22 are withdrawn; claims 1-3, 5, 7-9, 12, 15, 16, and 24 are rejected.

### (4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

## (5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

## (7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

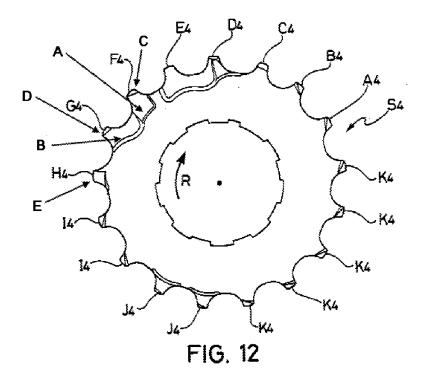
## (8) Evidence Relied Upon

6,340,338	Kamada	01-2002
2002/0086753	Yahata	07-2002

## (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-3, 5, 7-9, 12, 15, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamada (6,340,338).



In Re claim 1, with reference to Fig. 3, 13, 14, and 12 (above), Kamada discloses a chainwheel assembly including a plurality of chainwheels (s1-s7) engageable with a chain (23) having successive alternating pairs of inner link plates and outer link plates connected by pins, the pins surrounded by rollers, the chainwheel assembly comprising: at least one smaller chainwheel (s3) having a plurality of teeth spaced about its circumference; and at least one larger chainwheel (s4) having a greater number of teeth

spaced about its circumference than the smaller chainwheel, the larger chainwheel and the smaller chainwheel oriented relative to each other such that a distance between a center of the chain roller positioned between a pair of adjacent teeth on the larger chainwheel and the center of the chain roller between a pair adjacent teeth on the smaller chainwheel is substantially an integer multiple of the chain pitch, at least a first tooth (f4) of the pair of adjacent teeth (F4,G4) on the larger chainwheel includes a first lateral recess (A) having a first run-on ramp (see fig. 14), at least a second tooth (G4) of the pair of adjacent teeth disposed adjacent to the first tooth opposite the drive rotation direction including a second lateral recess (B) with a run-on ramp (see fig. 14).

In Re claims 2 and 3, see fig. 14.

In Re claim 5, see third tooth (H4) which includes a run-out chamfer (E).

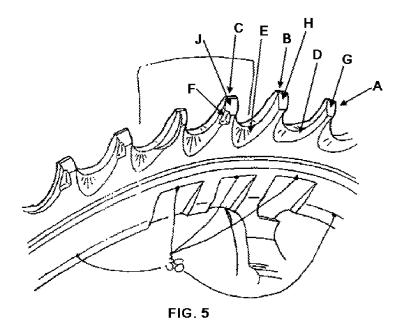
In Re claim 7, see fig. 14.

In Re claims 8, 9, and 12, see deflection chamfers (C,D) on the first and second tooth (F4,G4) in fig. 12 above.

In Re claim 15, see fig. 3.

In Re claim 16, see chamfers (C,D,E).

Claims 1-3, 5, 7, 8, 12, 15, 16, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Yahata (2002/0086753).



In Re claim 1, with reference to Fig. 5, above, Yahata discloses a chainwheel assembly including a plurality of chainwheels (see fig. 15) engageable with a chain (10), the chainwheel assembly comprising: at least one smaller chainwheel (50) having a plurality of teeth spaced about its circumference; and at least one larger chainwheel (40) having a greater number of teeth spaced about its circumference than the smaller chainwheel, at least a first tooth (A) of a pair of adjacent teeth (A,B,C) on the larger chainwheel includes a first lateral recess and run-on ramp (D), at least a second tooth (B) of the pair of adjacent teeth disposed adjacent to the first tooth opposite the drive rotation direction including a second lateral recess and run-on ramp (E).

In Re claims 2 and 3, see fig. 5.

In Re claim 5, see third tooth (C) which includes a run-out chamfer (F).

In Re claim 7, see fig. 5.

In Re claims 8 and 12, see deflection chamfers (G,H) on the first and second tooth (A,B) in fig. 5 above.

In Re claim 15, see fig. 11.

In Re claim 16, see chamfers (G,H,J).

In Re claim 24, the recesses are separate from each other.

## (10) Response to Argument

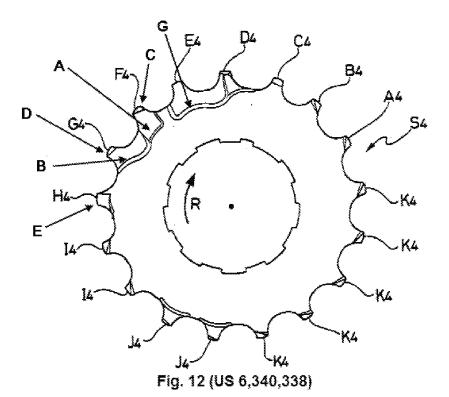
Regarding the 102(b) rejection in view of Kamada, Appellant argues that:

1. Kamada fails to disclose the structure of first and second run-on ramps, and instead, Kamada discloses a single run-on ramp. Examiner notes that the Nagano (US 4,889,521) reference is discussed in the text of Kamada noted by Appellant, and is not relied upon in the rejection.

Regarding Appellants arguments, the examiner notes that claim limitations are given the broadest reasonable interpretation in light of the disclosure.

First, regarding the referenced patent to Nagano, the examiner notes that col. 10, lines 59-61 of Kamada state "The downshift teeth  $F_3$ - $I_3$  are relatively conventional and configured substantially in accordance with U.S. Pat. No. 4,889,551 to Nagano." Kamada does not disclose that any other feature of the sprocket is the same, or intended to be the same as the referenced patent to Nagano.

Page 8



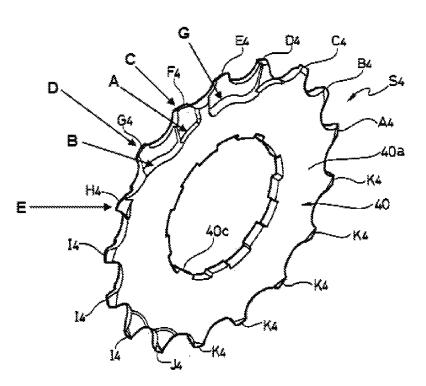


Fig. 14 (US 6,340,338)

Page 9

Second, the examiner maintains that Appellant's interpretation of a "run-on ramp" is narrower that justified by the instant disclosure and claim language, and that Kamada discloses a first and second run-on ramp, as claimed. The examiner points out that the claims do not state that the first and second lateral recesses are separately provided, or that the first and second run-on ramps are separately provided with the respective first and second lateral recesses. Therefore, with reference to figs. 12 and 14 of Kamada, above, the examiner asserts the sprocket (S<sub>4</sub>) of Kamada includes the broadly claimed first and second run-on ramps (see reference characters "A" and "B", understood to be the first and second run-on ramps). With further reference to fig. 14 above, the examiner points out that the first and second lateral recesses below teeth C and D have different lateral depths, meaning that they are two separate, but adjacent, recesses. The examiner additionally points out that run-on ramp A is narrower in lateral width than run-on ramp B, meaning that at least a portion of run-on ramp B (the portion laterally closer to the tooth) is separately provided, but adjacent, from run-on ramp A.

Alternatively, even if one were to interpret the claim as requiring that the first and second run-on ramps and lateral recesses be completely separate, the examiner points to first tooth ( $E_4$ ) and second tooth ( $F_4$ ) having completely separate lateral recesses and first and second run-on ramps ( $G_4$ ).

Regarding Appellant's arguments that Kamada fail to teach the claimed intended use of the run-on ramps, the examiner notes that the claims are examined as per MPEP 2106 and 2111.04, and that patentable weight is given to the structure and not the intended use of the claimed invention. The examiner further points to figs. 18 and 19 of

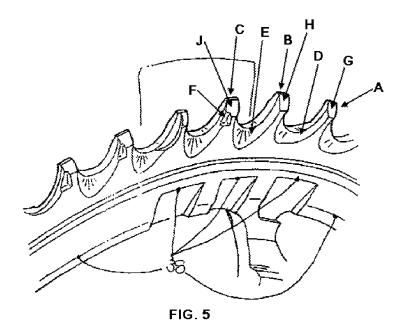
Application/Control Number: 10/711,842

Art Unit: 3657

Kamada, which shows that during a shifting maneuver, the link plates of the chain come into contact with, and are braced against, the run-on ramps (see adjacent P<sub>1</sub>).

Regarding the 102(b) rejection in view of Yahata, Appellant argues that:

1. The chamfered portion fails to allow the outer link plate to be positioned laterally at the first tooth and fails to lift the outer link plate in a radial direction when the out link plate is positioned laterally at the first tooth.



Regarding Appellants arguments, the examiner notes that claim limitations are given the broadest reasonable interpretation in light of the disclosure. The examiner maintains that Appellant's interpretation of a "run-on ramp" is again narrower that justified by the instant disclosure and claim language, and that Yahata discloses a first and second run-on ramp, as claimed. The examiner points out that the claims merely

state that there are first and second lateral recesses having the first and second run-on ramps adjacent the first and second teeth. Therefore, with reference to fig. 5 of Yahata, above, the examiner asserts the sprocket of Yahata includes the broadly claimed first and second recesses and corresponding run-on ramps (see reference characters "D" and "E) adjacent first and second teeth (see "A" and "B"). Regarding Appellant's arguments that the portions of Yahata interpreted by the examiner to be the run-on ramps are merely chamfers intended to resist trapping mud, the examiner notes that the claims are examined as per MPEP 2106 and 2111.04, and therefore patentable weight

## (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

is given to the structure and not the intended use of the claimed invention.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Thomas Irvin/

Examiner, Art Unit 3657

/Bradley T King/

Application/Control Number: 10/711,842 Page 12

Art Unit: 3657

Primary Examiner, Art Unit 3657

Conferees:

Robert Siconolfi /RS/

Marc Jimenez /MJ/